

In the Claims

Please cancel claims 1, 2, 4, 7-9, 24-28 and 32. This listing of claims replaces all prior versions.

1-28. (canceled)

29. (previously presented) A speakerphone, comprising:

a base unit; and

a portable handset communicatively coupled to the base unit via a wireless channel, including

a microphone;

a speaker;

a first speech path to the speaker;

a second speech path to the microphone;

a first programmable digital level-adjustor adapted to be controlled to provide a gain adjustment along the first speech path;

a second programmable digital level-adjustor adapted to be controlled to provide a gain adjustment along the second speech path;

a logic decision circuit, coupled to the first and second programmable digital level-adjustors, adapted to alternately receive speech signals in the respective speech paths and determine regularly the respective peak amplitudes of signals in the first and second speech paths, and, in response, controlling the gains of the respective first and second speech paths during full duplex operation by controlling the first and second programmable digital level-adjustors and is further adapted to operate in a plurality of full duplex substates, each substate defining a different relationship between respective gains of the first and second speech paths.

30. (previously presented) A speakerphone arrangement, according to claim 29, wherein the substates include a first unbalanced gain relationship used in response to the speech volume of the first speech path that is less than the speech volume of the second speech

path, and a second unbalanced gain relationship used in response to the speech volume of the first speech path that is greater than the speech volume of the second speech path.

31. (previously presented) A speakerphone arrangement, according to claim 29, wherein the substates include a balanced gain relationship, first unbalanced gain relationship used in response to the speech volume of the first speech path that is less than the speech volume of the second speech path, and a second unbalanced gain relationship used in response to the speech volume of the first speech path that is greater than the speech volume of the second speech path.

32. (canceled)

33. (previously presented) A speakerphone, comprising:

a base unit; and

a portable handset communicatively coupled to the base unit via a wireless channel, including

a microphone;

a speaker;

a first speech path to the speaker;

a second speech path to the microphone;

a first programmable digital level-adjustor adapted to be controlled to provide a gain adjustment along the first speech path;

a second programmable digital level-adjustor adapted to be controlled to provide a gain adjustment along the second speech path;

a logic decision circuit, coupled to the first and second programmable digital level-adjustors, adapted to alternately receive speech signals in the respective speech paths and determine regularly the respective peak amplitudes of signals in the first and second speech paths, and, in response, controlling the gains of the respective first and second speech paths during full duplex operation by controlling the first and second programmable digital level-adjustors and is further adapted to operate in a plurality of full duplex substates, each substate

defining a different relationship between respective gains of the first and second speech paths, one of the substates include a balanced gain relationship, another substate including a first unbalanced gain relationship used in response to the speech volume of the first speech path that is less than the speech volume of the second speech path, and another substate including a second unbalanced gain relationship used in response to the speech volume of the first speech path that is greater than the speech volume of the second speech path.

34. (previously presented) A speakerphone, comprising:

- a base unit; and
- a portable handset communicatively coupled to the base unit via a wireless channel, including
 - a microphone;
 - a speaker;
 - a first speech path to the speaker;
 - a second speech path to the microphone;
 - a first programmable digital level-adjustor adapted to be controlled to provide a gain adjustment along the first speech path;
 - a second programmable digital level-adjustor adapted to be controlled to provide a gain adjustment along the second speech path;
 - a logic decision circuit, coupled to the first and second programmable digital level-adjustors, adapted to alternately receive speech signals in the respective speech paths and determine regularly the respective peak amplitudes of signals in the first and second speech paths, and, in response, controlling the gains of the respective first and second speech paths during full duplex operation by controlling the first and second programmable digital level-adjustors and is further adapted to operate in a plurality of full duplex substates, with the logic decision circuit transitioning between substates in response to: the volume levels in the first and second speech paths, and the current substate.

35. (previously presented) A speakerphone arrangement including a microphone and a speaker, comprising:

a first speech path to the speaker;

a second speech path to the microphone;

a first level-adjustment means adapted to be controlled to adjust the volume along the first speech path;

a second level-adjustment means adapted to be controlled to adjust the volume along the second speech path;

means for alternately receiving speech signals in the respective speech paths and determining regularly the respective peak amplitudes of signals in the first and second speech paths, and in response controlling the gains of the respective first and second speech paths during full duplex operation by controlling the first and second level-adjustment means.

36-37. (canceled)